

## Assessment Guidelines for Admission to Grade IX

**The child should be able to:**

### English and Urdu

- Understand and speak confidently and fluently in English and Urdu
- Read with understanding, unabridged short stories, novels and plays
- Write an argumentative essay / short story with accuracy of language, effective vocabulary, and varied sentence structure, of about 250 words on a given topic
- Read and answer comprehension questions based on a given passage

### Mathematics

- Work with whole numbers
- Work with real numbers
- Work with fractions and decimals
- Carry out conversions
- Understand the basic concepts of geometry
- Calculate the area and perimeter of simple geometrical shapes
- Work with algebra

### Science

Demonstrate an understanding of:

### Biology

- Cell structure: animal & plant (their differences and similarities)
- Photosynthesis and respiration
- Ecosystem (food chain, food web, food pyramid)

- Organ systems (digestive, respiratory, circulatory)
- Chemistry
- Atomic structure and Periodic Table
- Bonding (ionic and covalent)
- Acid and alkalis
- Different types of reactions
- Identification test for carbon dioxide and hydrogen

### Physics

- Units and measurement
- Mass, weight and density
- Forces (contact, non-contact)
- Relationship b/w force, mass and acceleration (Newton's laws of motion)
- Pressure  $P=F/A$  (Effect of force and area on pressure)

**Important note:** The child should come for the test on time and carry complete stationery (pen, pencil, eraser, etc.) as well as geometrical instruments (compass, protractor, ruler, etc).